

ABSTRACT

A memory cell having a configuration completely different from that of a memory cell of a conventional memory and having various excellent characteristics, and also a method for manufacturing the same, are provided. A memory having various excellent characteristics is provided as well by use of the memory cell. Furthermore, a method for recording/reading information in/from the memory is provided. The memory cell includes a memory medium for holding information, a controlling part for recording information in the memory medium, and a detecting element for reading information from the memory medium, where the detecting element is provided independently of the memory medium. More specifically, for example, the memory medium is a magnetic device, the controlling part includes a first magnetic field generating part for applying a magnetic field to the magnetic device so as to change a magnetization state of the magnetic device, and the detecting element is arranged in the vicinity of the magnetic device and has a magnetoelectric converting part whose electric characteristics vary in accordance with the magnetization state of the magnetic device.